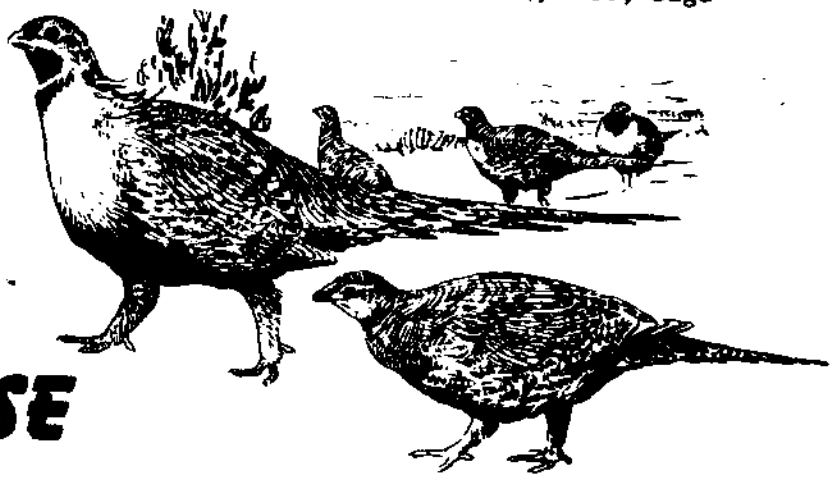
Habitat management for

SAGE GROUSE



In the State of Washington

The sage grouse, *Centrocercus urophasianus*, was formerly abundant wherever big sagebrush was present in eastern Washington. The large bird and its eggs were an important item in the diet of the early settlers of the area. Destruction of its habitat by plowing and sagebrush control, over-shooting, and perhaps unknown factors have drastically reduced its numbers, and it is now absent from most of its former range. As a game bird it is of minor importance in Washington, with the annual legal harvest usually under 3,000 birds. Excluding the recently introduced turkey, it is our largest upland game bird, the cocks attaining a weight of over six pounds. It is easily recognized by its large sized, spikelike tail feathers, and whitish chest with black belly.

The sage grouse is promiscuous in its mating habits. Beginning in early spring the cocks travel up to several miles to a central "strutting ground," where each day at dawn and dusk they strut and display before the hens. Mating occurs at the strutting ground. The nest is located on the ground, under a sage brush, or in a clump of ryegrass, and usually contains from 7 to 13 eggs.

Habitat Needs

Food. The sage grouse has a specialized digestive system. It possesses a thin-walled stomach adapted to a soft vegetable diet. All other gallinaceous game birds have thick-walled gizzards designed for grinding hard seeds. For this reason the sage grouse is inseparably linked with the sagebrush plant for food. About 75 percent of the diet consists of sagebrush leaves. Forbs and insects are also important to the bird's nutritional requirements.

Important foods, other than sagebrush, include alfalfa, clover, dandelion, lettuce (wild), pussytoes, serviceberry, wheat, and willow. Somewhat less important are biscuitroot, milkvetch, mustard, rose, salsify, and sweetclover. Animal foods comprise up to 10 percent of the diet. Ants, beetles, bugs, and grasshoppers are important items.

Cover. Typical sage grouse habitat consists of lightly-grazed areas of big sagebrush interspersed with grasses and forbs. Wet meadows and wheat fields adjoining such areas are extensively used. Clearings from one-tenth to ten acres in size are used for strutting grounds.

Water is used daily when it is available, although sage grouse can go for long periods without drinking. The best populations are usually found near water.

Habitat Management

Preservation of key habitat areas, particularly "strutting grounds" and wintering areas, is vital to the survival of the sage grouse. Recent programs involving the control of sagebrush to increase grass production for range cattle could destroy some of these key areas and eliminate the grouse populations dependent on them. The following guidelines for those who intend to control sagebrush within the range of the sage grouse have been drawn up by the SCS and approved by other conservation agencies.

1. Sagebrush should not be treated or destroyed within 1/4 mile of known sage grouse "strutting grounds." Leave a narrow untreated strip connecting "strutting grounds" to permanent untreated sagebrush cover where possible.

2. An irregular strip of untreated sagebrush approximately 100 yards wide should be left on each side of streams and brushy watercourses and around all grassy meadows.

3. Deciduous trees and shrubs in proposed brush control areas should be protected from spray or fire.

4. Sagebrush-control programs should not be undertaken where big sagebrush density does not exceed 435 plants per acre with 20 percent crown canopy cover. (Average plant determined to have 2 foot crown.) Sagebrush below this density is generally considered to be noncompetitive with range grasses. Improvement of the grass stand would be limited even though all sagebrush were removed.

5. The practice of treating and leaving sagebrush in alternate or formal, geometric patterns is not desirable. Projects should be designed on an irregular pattern, considering natural terrain, density of sagebrush, soils, etc. wherever possible.

6. Known sage grouse wintering areas should not be treated.